

**Notice of Allowability**

Application No.

10/608,363

Examiner

Erick Rekstad

Applicant(s)

CUTLER, ROSS

Art Unit

2621

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed August 17, 2007.
2. ☒ The allowed claim(s) is/are 1-22 and 25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

This is a Notice of Allowance for Application no. 10/608,363 in response to the RCE filed on August 17, 2007.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Katrina Lyon on August 30, 2007.

The application has been amended as follows: replace claim 22 with

--A computer-readable medium having computer-executable instructions for viewing or recording a video-conference, said computer executable instructions comprising:

capturing images of an event in 360 degree with an omni-directional camera array, wherein said omni-directional camera comprises an N-sided mirror located above N cameras arranged to be equally spaced around the circumference of a circle in a circular fashion and tilted upward slightly from the horizontal plane, and positioned to have a small non-zero distance between their virtual centers of projection so as to provide minimal parallax error at a predefined distance from the cameras, each capturing an image reflected in a different side of said N-sided mirror; and

stitching together said images captured by each of N cameras using a calibration surface to create a composite image.--

Cancel claims 23 and 24.

***Allowable Subject Matter***

Claims 1-22 and 25 are allowed.

The following is an examiner's statement of reasons for allowance: After a further search and a thorough examination of the present application and in light of the Applicant's arguments and in light of the prior art made of record, claims 1-22 and 25 are found to be in condition for allowance.

The claims are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a system, process and computer readable media for obtaining a 360 degree image using an N-sided reflective surface and N cameras. Wherein the cameras are aligned to have a small non-zero distance between virtual centers of projection relative to each other which provides minimal parallax error at a predefined distance from the cameras.

The closest prior art (US Patent 6,141,145 to Nalwa) teaches the use of a stereo panoramic viewing system where in one set of cameras has a different virtual center from another set of cameras (Col 15 Lines 19-39, Fig. 24). Nalwa is silent on the claim limitations related to the use of N cameras wherein the cameras are aligned to have a small non-zero distance between virtual centers of projection relative to each other which provides minimal parallax error at a predefined distance from the cameras.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 571-272-7338. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2621


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